COMPATIBILITY DETERMINATION
CONSTRUCTION OF A COMMUNICATION TOWER
CABEZA PRIETA NATIONAL WILDLIFE REFUGE

USE

The U.S. Department of Homeland Security (DHS) proposes to construct a communication tower within the Cabeza Prieta National Wildlife Refuge and Wilderness Area (CPNWR). As defined by DHS, The Secure Border Initiative (SBI) is a comprehensive multi-year plan established by DHS in November 2005, to secure America's borders and reduce illegal immigration. SBI*net* is the component of SBI charged with developing and installing technology and tactical infrastructure solutions to gain operational control of our Nation's borders. The goal of SBI*net* is to field the most effective, proven technology, infrastructure, personnel, and response platforms, and integrate them into a single, comprehensive border security suite for DHS. The proposed communication tower is part of the SBI*net,* Ajo1 Project.

REFUGE NAME

Cabeza Prieta National Wildlife Refuge
Pima and Yuma Counties, Arizona

ESTABLISHING AND ACQUISITION AUTHORITY

President Franklin D. Roosevelt established the Cabeza Prieta National Wildlife Refuge on January 25, 1939 by Executive Order 8038.

REFUGE PURPOSES

1. The refuge was "reserved and set apart for the conservation and development of natural wildlife resources, and for the protection and improvement of public grazing lands and natural forage resources…Provided, however, that all the forage resources in excess of that required to maintain a balanced wildlife population within this range or preserve should be available for livestock…" (Executive Order 8038 January 25, 1939).
2. Enactment of the Arizona Desert Wilderness Act of 1990, designated over 90 percent of the refuge as wilderness and created a supplemental refuge purpose of wilderness protection in accordance with the Wilderness Act of 1964.
3. Several other Federal policies, regulations, and laws affect refuge management activities. Preeminent among these is the Endangered Species Act of 1973, this act mandates the protection and recovery of threatened and endangered species.

NATIONAL WILDLIFE REFUGE SYSTEM MISSION

The mission of the system is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant

resources and their habitats within the United States for the benefit of present and future generations of Americans.

DESCRIPTION OF USE

DHS proposes to construct one communication tower at an existing communication site in the Growler Mountains on the CPNWR and wilderness area (Figure 1) as part of the SBI*net*, Ajo1 Project. The tower will function as a communications relay tower (CRT) between towers located on the Organ Pipe Cactus National Monument and the U.S. Border Patrol Ajo Station. The CRT is proposed as a steel lattice structure, attached to a concrete foundation that will be mounted to the ground with rock anchors. The height of the structure will be approximately 33.5 feet (10.2 meters). In addition, a 16 foot wide by 14 foot tall solar panel array will be attached to the tower. There will also be three storage units placed within the footprint of the tower to store batteries and communication equipment. In order to avoid damage to the sensitive electronic equipment, a grounding ring must be installed around the structure. The grounding ring will need to be installed around the tower approximately 18-30 inches below the ground surface. The construction of the grounding ring will result in impacts throughout the 35 x 35 feet project area. The permanent construction buffer will be 35 feet x 35 feet (10.7 meters x 10.7 meters) (Figure 2).

A bare minimum of clearing, grading and leveling will be required to install the CRT. DHS will deploy the CRT necessary equipment for installation using a Kaman K-Max helicopter with a lift capacity of 6,000 pounds. A helicopter capable of carrying no more than nine passengers will be used to transport construction personnel to the site. Helicopter lifts will originate from the Ajo Airport and follow a route designed to minimize impacts to Sonoran pronghorn (*Antilocapra americana sonoriensis*) (Figure 3). Approximately 85 flights are needed to complete the construction of the CRT (Table 1).

According to the September 2009, Draft Environmental Assessment for the Proposed SBI*net* Ajo-1 Tower Project (EA) prepared by DHS, the purpose of the proposed action is to improve U.S. Customs and Border Protection's (CBP) efficiency and probability of detection, identification, and apprehension of individuals illegally entering the U.S. or conducting illegal smuggling activities. The objective of the SBI*net* project is to maximize surveillance along approximately 30 linear miles of U.S. border within Organ Pipe Cactus National Monument and the most eastern portion of CPNWR.

This SBI*net* Ajo1 project is needed to:

1. Provide more efficient and effective means of assessing all border activities;
2. Provide rapid detection and accurate characterization of potential threats;
3. Provide coordinated deployment of resources to apprehend cross border violators;

4. Reduce crime in border communities and to improve the quality of life and economic vitality of border regions through provision of the tools necessary for effective law enforcement; and
5. Increase surveillance and interdiction efficiency, reduce environmental impacts, and enhance habitat restoration efforts.

The impacts to trust resources from the illegal smuggling of people and narcotics into the CPNWR have been well documented. Although there are no accurate estimations of the level of smuggling activities across the CPNWR and surrounding areas, impacts from these activities can be observed throughout the CPNWR and surrounding areas. Because there are very few roads and the area is extremely remote, CBP must utilize east west roads and observe tire and foot sign. Once sign is identified, agents travel off-road often via vehicle. This illegal activity and subsequent operational strategy has resulted in a tremendous network of foot trails, two tracks, and illegal roads throughout the project area, much of which is federally designated wilderness. In addition to illegal roads and trails, these illegal activities have resulted in a substantial volume of trash, abandoned vehicles, livestock trespass, and increased crime and security issues. There has also been an increase in the occurrence of wildfires and we have observed outbreaks of invasive species tied directly to illegal smuggling activities. The need to develop a better strategy to identify and interdict illegal smuggling operations is needed to meet both the purpose and need of the SBI*net* program as well as the mission of CBP and Department of Interior (DOI) managed lands along the international border with Mexico.

In March 2006, DHS entered into a Memorandum of Understanding (MOU) with DOI and the Department of Agriculture regarding cooperative national security efforts on Federal lands along the U.S. Border. The MOU specifically states, "The parties are committed to preventing illegal entry into the United States, protecting Federal lands and natural and cultural resources, and – where possible – preventing adverse impacts associated with illegal entry by cross border violators." Section IV(B)(6) of the MOU allows for the installation or construction of tactical infrastructure on DOI lands, including areas designated as wilderness provided it is the minimum tool necessary.

The April 2007, CPNWR Comprehensive Conservation Plan, Wilderness Stewardship Plan, and Environmental Impact Statement (CCP) references the existing agreements (including the 2006 MOU) between CPNWR and CBP in addition to cooperative activities such as joint operations and the deployment of remotely operated sensors. However, surveillance and communication towers were not mentioned or evaluated in the CCP.

AVAILABILITY OF RESOURCES

Authorizing the construction of a CRT and associated maintenance of the CRT, will require some expenditure of CPNWR resources, including personnel and funding. DHS will be

responsible for the planning, construction, and maintenance of all improvements related to the project, but there will be costs associated with the long-term coordination, monitoring, and evaluation of the tower project in combination with other DHS activities. CPNWR resources are extremely limited and when staff time is utilized coordinating with DHS on border related issues, the annual goals and objectives necessary to successfully manage the CPNWR are not met. However, the administration and management of the proposed CRT tower can be accomplished within existing financial and personnel resources available to the CPNWR.

ANTICIPATED IMPACT OF THE TOWER

Section 4(c) of the Wilderness Act of 1964 generally prohibits the placement of any type of permanent infrastructure in wilderness, except as necessary to meet minimum requirements for the administration of the area for the purpose of the Wilderness Act. Furthermore, we generally view the development of any infrastructure considered non beneficial to wildlife as an impact to wildlife or their habitats.

However, the current strategy for identification and interdiction of illegal activity has resulted in a significant amount of resource damage to wilderness and other refuge trust resources including Sonoran Pronghorn, a federally endangered species. CPNWR staff repeatedly report the occurrence of well used routes of travel where no route previously existed. Off road interdiction activities have resulted in a proliferation of roads on the refuge. We conservatively estimate there are at least three times as many frequently used roads present on the refuge than at the time of wilderness designation; this does not include the lesser used trails that wind through virtually every valley within the refuge. In addition to impacts to wilderness character associated with off road travel, the current strategy for identification and interdiction of illegal activity has affected the movement of Sonoran Pronghorn through the Growler Valley. The Sonoran pronghorn population within the U.S has failed to increase since 2004; likely because of the level of activity occurring within this area. Furthermore, a significant portion of pronghorn are currently occupying habitat within the tactical ranges on the Barry M. Goldwater Range, affecting the ability of the U.S. Air Force to conduct training missions. Pronghorn are staying on the tactical ranges and avoiding the southeast portion of their summer range. I believe this is due to the level of smuggling and resulting interdiction activities occurring along the route pronghorn take to access this summer habitat. Implementing actions to improve law enforcement effectiveness and thus deter illegal to activities would benefit wilderness, Sonoran pronghorn, and other refuge trust resources as well as meet the mission requirements of the CBP.

CBP proposes to place the CRT at an existing communication site utilized by CPNWR, the U.S. Air Force and CBP. The CRT will relay information about illegal smuggling activity occurring within the OPCNM and CPNWR Wilderness Areas. We believe the CRT, if effective, will be a tool to help improve identification and interdiction of illegal smuggling activities in the eastern portion of the Growler Valley and will lead to a cessation of off road travel in this area.

Therefore, the CRT, if effective, will be a useful tool and have a positive impact on wilderness stewardship on the eastern portion of the wilderness area and may improve an historical pronghorn migration corridor, allowing pronghorn to return to areas in the southeastern portion of CPNWR and western portions of OPCNM.

Other trust resources may also benefit from an effective SBI*net* tower configuration. If effective, we anticipate a reduction in the amount of trash both within the Growler Valley and Childs Valley. Both of these valleys have numerous congregation spots that are saturated with litter, clothes, and human excrement. We also anticipate a reduction in the number of wildfires occurring on the refuge, we typically have at least one fire a year started by illegal border crossers. We also anticipate a reduction in crime and improved security associated with the configuration. We have been forced to develop a border safety plan where we do not allow CPNWR staff to travel south of El Camino del Diablo or to camp in high use areas unless escorted by law enforcement personnel; this has resulted in a reduction of CPNWR activities in these areas. Finally, we are consistently diverted away from refuge management activities in order to coordinate with CBP to address the various security risks, issues, and tactical infrastructure requests.

DHS states in their September 2009, EA that the proposed project will result in overall beneficial impacts within the region through a reduction in illegal activities and resulting decreased human activity in sensitive areas such as designated wilderness and endangered species habitats. A reduction in illegal activities and subsequent law enforcement interdiction efforts would also reduce adverse impacts to the natural and human environment and allow currently disturbed habitats to rehabilitate through natural processes or management efforts. If these towers are effective, DHS believes illegal activities will drastically decrease in areas where towers are located. Conversely, areas without towers may see an increase in illegal activity. It is possible for an increase in impacts to CPNWR resources further to the west outside the influence of the SBI*net* towers.

<u>Direct Impacts</u>

The most significant direct impact from constructing a CRT within CPNWR is associated with wilderness. DHS will be constructing a permanent installation in wilderness. Furthermore, this permanent installation will be observable from a significant portion of the Growler Valley (Figure 4). DHS created Figure 4 and CPNWR does not agree with the entirety of the map. CPNWR believes the tower will also be readily observable from a significant portion of the Childs Valley as well as the northern portion of OPCNM and the eastern portion of lands managed by the Bureau of Land Management. Adverse effects on the visual qualities of designated wilderness will have a long-term moderate effect on wilderness quality within the eastern portion of CPNWR.

Other expected direct negative impacts of the CRT include the temporary disturbance of 0.03 acres during the construction of the CRT and 0.005 acres of permanent impacts associated with the construction and operation of the CRT. These impacts will include the removal of several plant species that are locally abundant within the area, including: brittlebush (*Encelia farinosa*), triangle-leaf bursage (*Ambrosia deltoidea*), and creosote (*Larrea divaricata tridentata*). Agaves (*Agave deserti simplex*) and saguaros (*Carnegiea gigantea*) will be avoided to the maximum extent possible; if individuals cannot be avoided a CPNWR approved botanist/restoration specialist will replant them nearby. We also expect direct impacts to wildlife associated with the construction of the CRT. DHS anticipates the construction of the CRT to take approximately five weeks. During this time, there will likely be at least one helicopter trip to the site each day. This will have an effect on desert bighorn sheep (*Ovis canadensis mexicanus*) especially if the construction is to occur in January or February as this is typically the beginning of their lambing season (although lambs can be dropped in December). Helicopter activity may also impact Sonoran pronghorn as the majority of pronghorn recovery actions are located in the Childs Valley, including two forage enhancement sites located immediately north of the planned helicopter travel route. If helicopter traffic flies over these areas, pronghorn may move from the area, which may affect their survival or reproductive potential. Daily helicopter traffic is also expected to cause desert bighorn sheep to move away from this area. This may have an effect on movement, dispersal, and even survival of desert bighorn sheep lambs if activity forces unnecessary movements. In addition, the placement of a 30 foot tower may result in bird and bat strikes flying near the tower. There are a large number of agaves and saguaros nearby and this may result in mortality to lesser long-nosed bats (*Leptonycteris curasoae yerbabuenae*). In addition to construction activities and impacts from the CRT, DHS plans to conduct four annual maintenance visits to the site each year. This will result in four helicopter landings in wilderness each year to maintain this site.

DHS provided a Biological Assessment to the Arizona Ecological Services Field Office (AZESFO) on September 15, 2009, as part of the formal consultation process pursuant to section 7 of the Endangered Species Act of 1973. The AZESFO provided a final biological opinion (BO) on December, 09, 2009. The BO addresses conservation measures to minimize resources impacts to federally listed species associated with constructing the Ajo1 SBI*net* project. The Service determined the project as proposed would not jeopardize the continued existence of Sonoran pronghorn or lesser long-nosed bats. In addition, DHS identified numerous offsetting measures, if implemented, would offset impacts to both Sonoran pronghorn and lesser long-nosed bats. In order to minimize impacts to Sonoran pronghorn, DHS has agreed to have biological monitors survey areas prior to the onset of activity to ensure construction activities do not affect pronghorn. DHS has also agreed to follow an ingress and egress path that is located away from all existing pronghorn recovery projects. DHS will develop and implement a monitoring plan and program to document and assess tower related mortality of lesser long-nosed bats. This monitoring project is scheduled to begin once the construction of all Ajo1

towers is completed. If mortality of lesser long-nosed bats is identified at the towers, DHS will work on developing tower retrofits to reduce lesser long-nosed bat mortality.

Indirect Impacts

Overall, the Ajo1 project may indirectly increase adverse impacts to CPNWR wildlife and habitats as illegal activities may shift to the west away from the influence of the SBI*net* towers. This project could result in an increase in smuggling and interdiction activities to the west of the towers and increase off road impacts through the western portions of CPNWR. If illegal smuggling and subsequent interdiction efforts move into the bajadas and mountains, there could be substantial impacts to Sonoran pronghorn and lesser long-nosed bats and possibly desert bighorn sheep.

Within both the EA and the Biological Assessment, DHS concurs it is extremely likely for illegal smuggling traffic patterns to shift due to the placement of the Ajo1 Project. CBP will deploy agents, sensors, MSS units, and other technology to supplement tower technology. If, however, concerns arise regarding trends in illegal traffic and their effect on resources, CBP and the land managers will work collaboratively to find solutions to the operational challenges.

Visitor Use

Most visitors come to the refuge to watch wildlife, observe the Sonoran Desert vistas, camp, and hike. Visitors recreating in significant portions of the Growler Valley may observe the CRT and their wilderness experience may be compromised. Furthermore, visitors recreating in the non-wilderness portion of Childs Valley will also be able to observe the CRT, resulting in a degradation of wilderness character.

Many visitors come to CPNWR to experience the untrammeled and undeveloped nature of the CPNWR wilderness area. The presence of this CRT and its visibility over such a substantial area will detract and reduce the quality of the wilderness experience in the Childs and Growler Valleys. However, if effective, the Ajo1 project will significantly reduce the amount of illegal traffic and resulting off road interdiction activities by CBP. This decrease in off road impacts will substantially improve the wilderness quality of the eastern portion of the refuge, which is currently in a significantly degraded condition due to years of frequent off road smuggling and interdiction activities. Within the EA, DHS maintains that as illegal activity declines as a result of the towers, the amount of off road use by CBP is expected to decline. DHS expects the towers to help guide CBP to interdict illegal smuggling activities in targeted locations along roads and trails, thus leading to a decrease in damage associated with off road interdiction activities.

Cumulative Impacts

The construction of a CRT conflicts with several CPNWR wilderness goals and objectives. Furthermore, if the Ajo1 Project proves effective, these conflicts will be long term in nature as DHS has committed to removing the tower within a year if they determine the Ajo1 Project fails to meet the stated goals and objectives. Also, if the towers are effective and consequently the illegal smuggling traffic moves to the west onto CPNWR, wildlife, wilderness, and other trust resources may be significantly affected by smuggling and subsequent off road interdiction activities.

In addition to the towers, several bureaus within DHS have contacted CPNWR regarding potential infrastructure and development projects within the refuge. These projects include: widening of El Camino del Diablo; repair and maintaining vehicle routes through wilderness; and the construction of multiple repeater sites throughout the refuge. Many of these projects have been discussed with refuge personnel over the last few years, however with the completion of the tactical infrastructure project along the International border, DHS is beginning to examine other strategic needs. These requests do not seem to be coordinated within DHS and force refuge staff to react to each request independently.

Most of the projects will affect pronghorn, wilderness, sensitive cultural resources, and other refuge resources. Furthermore, the cumulative effects of these projects will have significant negative effects on these resources and potentially alter the character and feel of Cabeza Prieta NWR. The proposed widening of El Camino del Diablo may significantly degrade the feeling and association of the trail, which made it eligible for its current listing on the National Register of Historic Places. Over the last decade, there has been a proliferation of roads within the refuge wilderness area. There is a strong need to repair and maintain agreed upon access routes through wilderness. Large sections of routes through wilderness are impassible, resulting in very wide turnouts and alternate routes within wilderness. These routes are routinely used (4-8 trips/day). Maintenance of these routes would improve wilderness resources on the refuge, however, the Wilderness Act specifically prohibits permanent roads. In addition to the improvement of public use roads and routes through wilderness, DHS has also began discussions for six radio repeater stations on the refuge. Most of the repeater sites are located at existing disturbed locations, however one site is located in an undisturbed wilderness area within viewing distance from a public use road. In addition to these proposals, DHS also has plans for additional SBI*net* towers located on CPNWR. The planning for this proposal has been postponed, and is not expected to begin discussions until 2011. To my knowledge, there has been little coordination between DHS on how these proposed actions compliment or compete with each other. For example, the need to repair and maintain some wilderness routes or repeater sites may not be necessary based on the proposed alignment of SBI*net* towers. Furthermore, the cumulative impacts to wilderness and pronghorn may not be compatible with the Refuge Improvement Act and may significantly impair our ability to recover pronghorn within their current range. If these actions are proposed, it is essential for DHS to begin close coordination with CPNWR to discuss the merit of each

proposal, and if measures can be developed to avoid or minimize impacts so as to avoid significant cumulative adverse effects on CPNWR trust resources.

CONCLUSION

Since CPNWR shares 56 miles of International border with Mexico and has experienced substantial, widespread degradation of trust resources from illegal smuggling activities and subsequent interdiction efforts, I must consider both the long and short term effects of this proposal. Through the EA and Biological Assessment, DHS has tried to predict both the potentially adverse and beneficial effects from the construction and operation of the Ajo1 Project. DHS concludes within the EA the Ajo1 project will result in increased apprehensions of individuals illegally entering and/or illegally smuggling contraband into the U.S. and thus deter illegal smuggling activities from occurring within areas covered under the Ajo1 Project. If this occurs, the need for CBP to conduct off road interdiction efforts in the Growler Valley will substantially decrease, thus protecting wilderness character, Sonoran pronghorn, and other trust resources. The Service concurs with this determination.

Furthermore, if the towers fail to meet DHS's stated goals and objectives, DHS has agreed to remove towers within one year of this determination. In addition to removing towers, DHS will also remediate any impacts caused by construction, operation, and/or removal of the CRT. DHS is required to perform any conservation measures contained in the BO, such as site clean-up and habitat restoration.

The charge of this document is for the CPNWR to analyze the request by DHS to construct a CRT and determine if the CRT will materially interfere with or detract from the fulfillment of the mission of the National Wildlife Refuge System or the purposes of the CPNWR. A Compatibility Determination is made by the Refuge Manager using sound professional judgment. Namely a decision must be consistent with the principles of sound fish and wildlife management and administration, available science and resources, and adhere to the requirements of applicable laws and Service policies. Considered as part of this finding, determination, or decision is a Refuge Manager's field experience and knowledge of the particular refuge resources.

The construction and operation of the CRT will have a direct adverse affect to wilderness character within the eastern portion of CPNWR. However, this adverse affect is minimized by the increased apprehension and deterrence of illegal activities within the Growler Valley, a decrease in the amount of off road damage resulting from CBP interdiction illegal smuggling activities, improved security for the CPNWR staff, volunteers, and visitors, and the ability to begin implementing restoration projects in the Growler Valley. Given these anticipated benefits, the placement of the CRT will not materially interfere or detract from the fulfillment of the

National Wildlife Refuge System Mission or the purposes for which the refuge was established, including the Arizona Desert Wilderness Act of 1991.

Information found in the project's EA, Finding of No Significant Impact, and the final BO is incorporated by reference. The reader should refer to these documents for a more detailed understanding of the project and its' implications and effects to the environment. DHS is also required to implement the conservation measures contained in the BO.

PUBLIC REVIEW AND COMMENT

The National Wildlife Refuge System Improvement Act of 1997 requires the Refuge Manager to provide an opportunity for public review and comment for all compatibility determinations. The purpose of the review is to offer the public the opportunity to provide relevant information regarding the compatibility of the proposed use. The Refuge Manager must consider all information provided during the public review and comment period. The Refuge Manager must consider all information provided during the public review and comment period. The Refuge Manager is not required to respond but will use all information available to make the most informed decision possible.

Public review and comment will be solicited for this compatibility determination for a 15 day period beginning December 30, 2009 and ending January 14, 2009. The availability of the compatibility determination will be announced through a press release in the Arizona Daily Star and the Ajo Copper News. There will also be public notices posted in the Ajo Post Office, Gila Bend Post Office, Ajo Public Library, and the Maricopa County Sheriff's substation in Gila Bend.

DETERMINATION

____ Use is Not Compatible

____ Use is Compatible with the Following Stipulations

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY

For successful implantation of the SBI*net* project on CPNWR and consistent with the March 2006, MOU between DHS, DOI, and USDA, DHS and their contractors must cooperate closely with the CPNWR to implement measures to minimize and/or eliminate the adverse environmental impacts their activities have had and will have on the refuge. DHS must be held accountable for their activities and commit to cooperate with the CPNWR to avoid future and reverse existing adverse environmental impacts. Additional natural resource impacts associated with the construction and operation of tactical infrastructure and overall CBP operations will be addressed through subsequent written agreements between CBP and the CPNWR. Construction and operation of the CRT is approved if DHS agrees to the stipulations below:

Stipulation 1:
CBP (specifically Wellton Station, Yuma Sector, Ajo Station, and Tucson Sector), in coordination with CPNWR, will develop for implementation a strategic plan with specific goals, objectives, and needs necessary to deter illegal entry into the CPNWR. This plan shall recognize and include the ongoing planning associated with additional SBI*net* towers, radio repeaters, road maintenance, and other infrastructure needs. The cooperative development of strategic plan will allow CBP and the refuge to work together to find the tactical infrastructure needs necessary to deter illegal traffic moving through the refuge. This will allow for the successful completion of the missions of both CBP and the USFWS.

Stipulation 2:
Because the refuge straddles two different U.S. Border Patrol Stations operating out of two different sectors, CBP must ensure that coverage is maintained to the east and west of the project area.

Stipulation 3:
CBP will provide monthly reports that summarize illegal activities and off road interdiction actions occurring on the refuge in accordance with the 2006 MOU;

Stipulation 4:
If illegal smuggling traffic and/or off road interdiction activities increase on the refuge, CBP agrees to implement appropriate response to the illegal traffic to create deterrence through effective enforcement within CPNWR to minimize (in the long run) impacts associated with smuggling and resultant interdiction activities.

Stipulation 5:
CBP must commit to developing and implementing a Decommissioning and Restoration Plan. This plan must include both site cleanup and habitat restoration.

Stipulation 6:
The Special Use Permit (SUP) for the construction and operation of the CRT will be automatically renewed every two years provided the terms and conditions of the SUP are met by CBP. Should the Service find CBP out of compliance and unable to satisfy the Refuge Manager's direction for meeting the conditions of the SUP, the Service shall issue a sixty day notice in writing to CBP of the intent to terminate the SUP. During this sixty day notice, CBP and the Refuge will work together to seek resolution of outstanding permit conditions. Prior to the termination of the SUP, the issue will be elevated to the Secretary of DOI and the Secretary of DHS for review.

National Environmental Policy Act (NEPA) Compliance

DHS completed a Final Environmental Assessment and Finding of No Significant Impact for this project in December 23, 2009. The document can be found on the internet at the following url address: http://cbp.gov/xp/cgov/border_security/sbi/sbi_enviro_docs/nepa/ajo/ea_fonsi/

Table 1.

Construction Phases	Activities	Duration in Days	Minimum Number of Lifts					
			Construction/Equipment/Material					Personnel Lifts *
			Description	Purpose	Weight	Duration on site	Lift	
Civil Layout	A&B work, Flag/tag Establish site with basics (toilet, some tools) SWPPP measures	1	Toilet, Survey Equipment, Install SWPPP measures	Lay out and set up the site for construction.	1000	20 days	1	3
Civil 1	Lift required tools to site	3	Mini Excavator	Earthwork and Assy	6000	20 days	3	9
	Clear ground		Air Compressor (Atlas Copco 18 CFM), Rock Saw, Rock Drill, Chipping Hammers, Core Drill, Misc Tools	Prepare site, assembly	3000	12 days		
	Drill anchor points		Jobox, Generator, Fuel, Gin Pole, Grounding Equipment	Assembly	3000	20 days		
Tower Installation	Equipment foundation blocks	2	Base Foundation Wafer #1 w/ Anchor Bolts	Assembly	6000	Permanent	4	6
	Locate and anchor equipment		Base Foundation Wafer #2 w/ Anchor Bolts	Assembly	6000	Permanent		
	Erect Tower		30' RDT Assembly, Climbing Ladder w/ Safety Climb, Transmission Line Brackets, Antenna Mount, Air Terminal Kit Mounting Hardware	Assembly	3000	Permanent		
			Set Tower	Assembly	2000	Permanent		

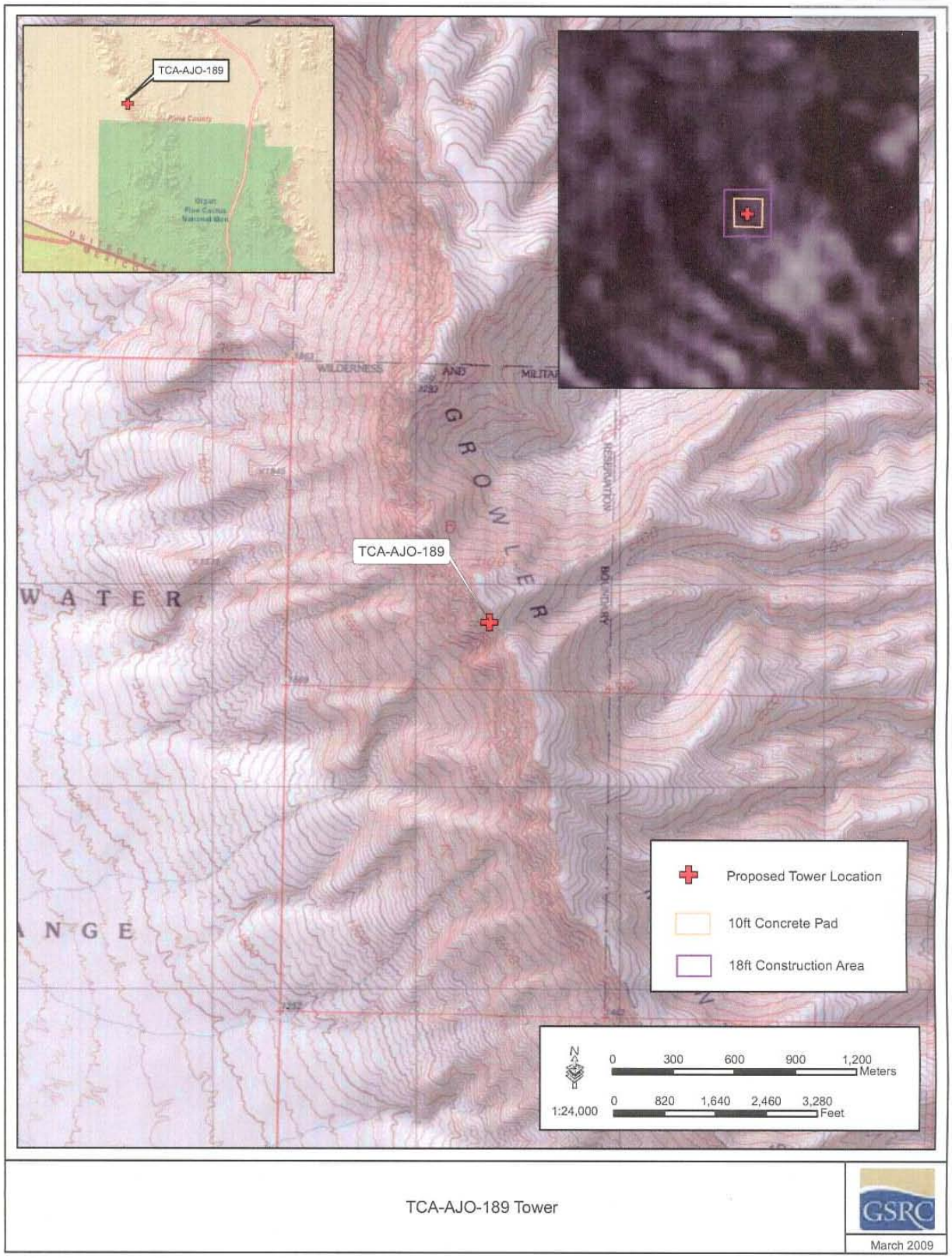
Table 1 (Continued).

Grounding System Installation	Dig trench	3	No Equipment Lifts Needed	Assembly	N/A	N/a	0	9
	lay grounding ring							
	Make welds/preliminary connections							
	Grounding Inspections							
	Backfill trench							
	ETPs for grounding							
Power System Installation	Install and test batteries	5	Battery Cabinet #1 (assembled), Installation Materials	Assembly	5000	Permanent	9	15
	Install solar panels		Battery Cabinet #2 (assembled), Installation Materials	Assembly	5000	Permanent		
	Install controls		8 Solar Panel Frames, 12 Solar Panel Frames	Assembly	2500	Permanent		
	Run cables		Water Tank (with Water)	Assembly	5000	Permanent		
	Connect to grounding		Carmanah Light, Air Terminal Kit (hardware already installed on tower), 8 Solar Panels, 12 Solar Panels, Electronics Rack	Assembly	1500	Permanent		
	ETPs for power		Set Battery Cabinet #1	Assembly	5000	Permanent		
			Set Battery Cabinet #2	Assembly	5000	Permanent		
			Set Equipment Foundation #1	Assembly	6000	Permanent		
			Set Equpment Foundation #2	Assembly	6000	Permanent		
Communications System Installation	Hang dishes	3	2 Microwave Dishes (6 inch), 2 Radios, 2 Cables	Assembly	1000	Permanent	1	9
	Connect waveguides							
	Teminate connections							
	Preliminary alignments							
	ETP testing procedures							

Table 1 (Continued).

Civil 2	Clean site	1	Remove Mini Excavator	Move earth	6000	20 days	4	3
			Air Compressor (Atlas Copco 18 CFM), Rock Saw, Rock Drill, Chipping Hammers, Core Drill, Misc Tools	Remove Tools	3000	12 days		
	Remove equipment, parts, packaging		Jobox, Generator, Fuel, Gin Pole, Package Material, Remaining Site Tools	Remove Tools	3000	20 days		
			Remove SWPPP Measures, Remove Toilet	Remove equipment	1000	20 days		
Restoration, Test, and Acceptance	Power up all components	3	No Equipment Lifts Needed	Acceptance of site	N/A	N/A	0	9
	Align dishes							
	ETPs							
	Boeing walkthrough							
	Punch list							
	Remove SWPPP measures							
	Revegitate, return site to natural state per contract							
		21	**Total Days**				**22**	**63** **85**

Figure 1

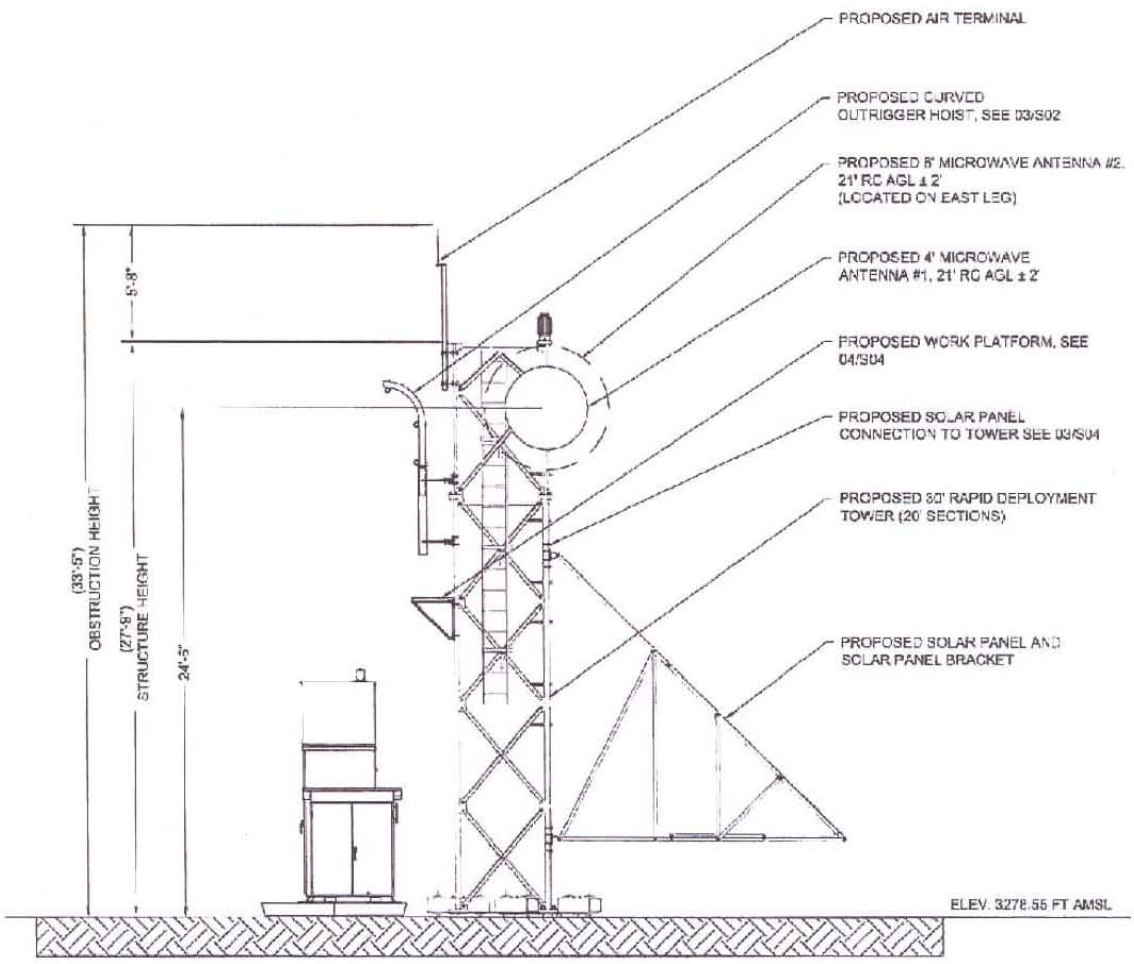


TCA-AJO-189 Tower

GSRC

March 2009

Figure 2



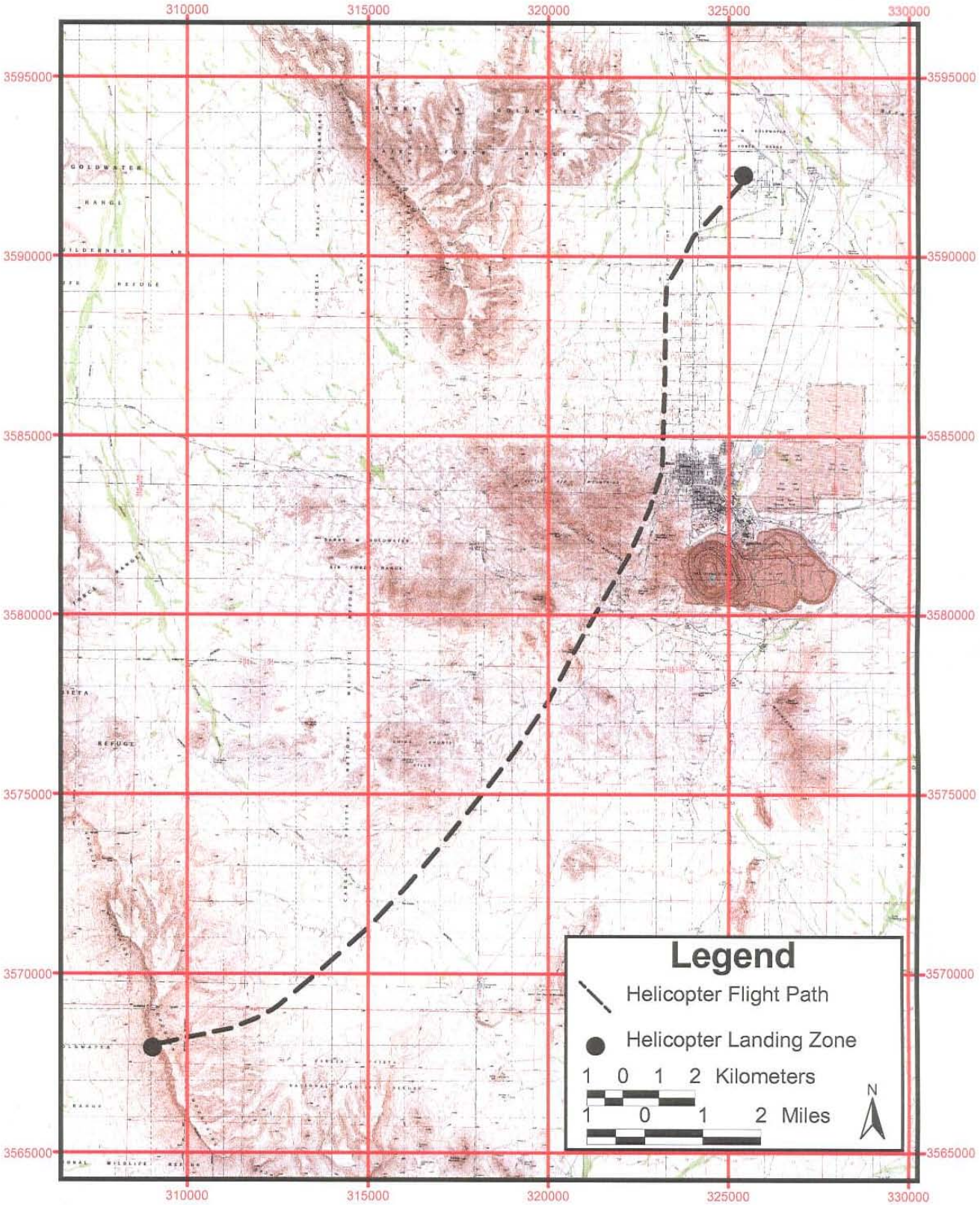
Source: Boeing 2009

Figure 2-7: Typical Profile of RAT Tower

GSRC

November 2009

Figure 3


310000
315000
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Legend
Helicopter Flight Path
Helicopter Landing Zone
1 0 1 2 Kilometers
1 0 1 2 Miles
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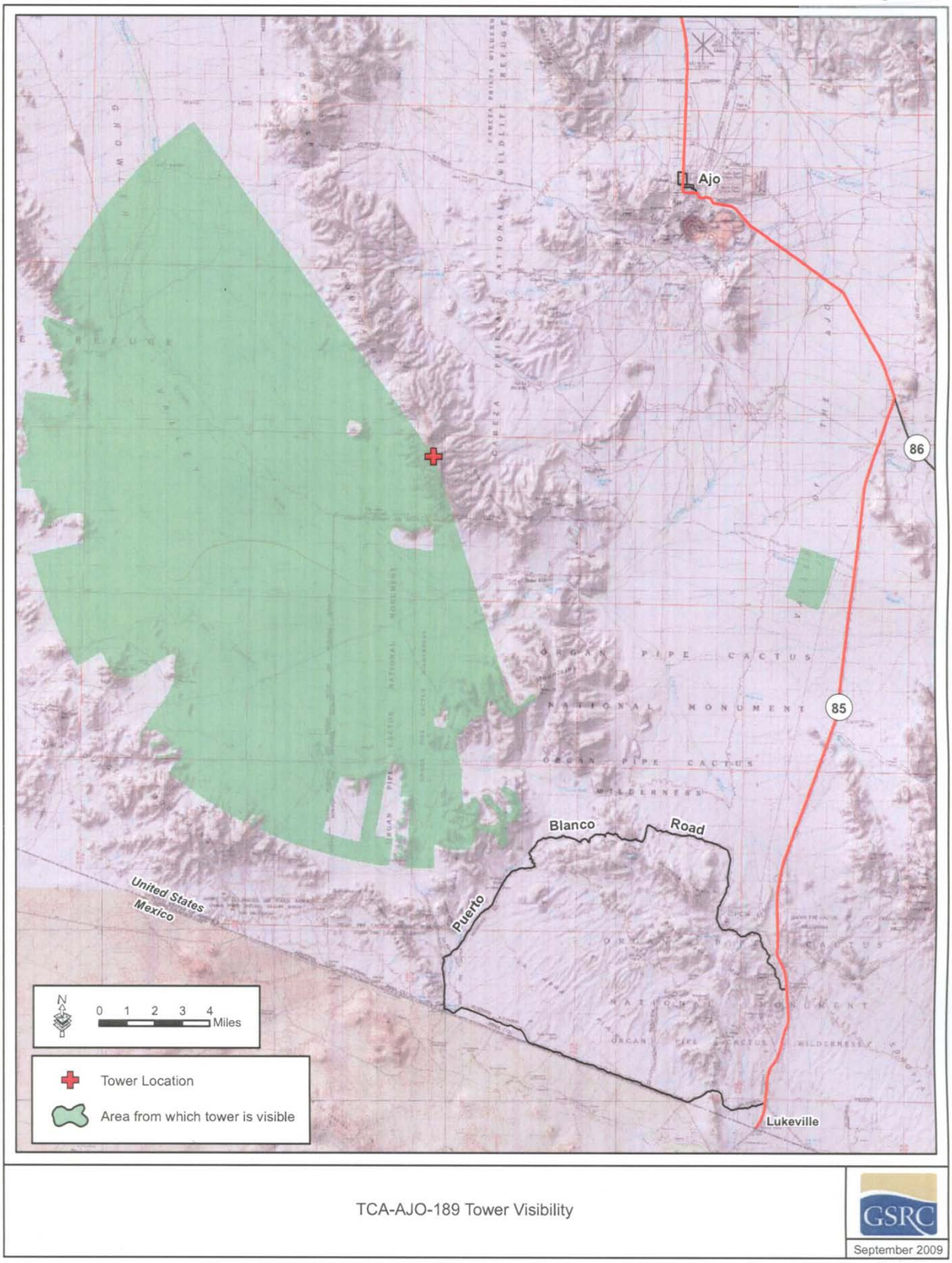
Figure 4



TCA-AJO-189 Tower Visibility

GSRC

September 2009